CLAIMS:

1. A method of scanning an optical recording medium in the form of a disk having data storage regions arranged in generally concentrically arranged track sections therein, the method comprising rotating the optical recording medium such that the disk moves in a spinning direction (S) with respect to a scanning spot, and maintaining tracking in a radial sense using a push-pull radial error signal generated by detecting push-pull signals from at least three radiation spots formed on the disk, a main spot (c), a forward spot (a) and a rear spot (b), to move the spots in a radial scanning direction (R) across adjacent track sections during a plurality of rotations of the disk, wherein the forward spot scans the optical recording medium in a position which is tangentially offset from the main spot in a direction opposite to the spinning direction, and the rear spot scans the optical recording medium in a position which is tangentially offset from the main spot in a direction coinciding with the spinning direction, characterized in that the method comprises positioning the three radiation spots with radial offsets such that the forward spot is located in a position which is radially offset from the main spot in a direction coinciding with the radial scanning direction, and such that the rear spot is located in a position which is radially offset from the main spot in a direction opposite to that of the radial scanning direction.

2. A method according to claim 1, wherein the push-pull signals are detected using three spot detectors, first order satellite spot detectors (40, 42) each including two detector elements providing respective signals a1, a2; b1, b2, and zeroth order spot detector (44) including four quadrant detector elements providing respective signals c1, c2, c3, c4.

3. A method according to claim 2, wherein a push-pull radial error signal (RE) is processed as follows:

$$RE = c1\text{-}c2\text{-}c3+c4 - \gamma(a1\text{-}a2+b1\text{-}b2)$$

where γ is a grating ratio.

4. A method according to claim 2, wherein a push-pull radial error signal (RE) is processed as follows:

$RE = c1\text{-}c2\text{-}c3\text{+}c4 - \gamma_1(a1\text{-}a2) - \gamma_2(b1\text{-}b2)$

where γ_1 and γ_2 are different grating ratios.

5. A method according to claim 3 or 4, wherein the processing of the radial error signal is altered in dependence on a scanning condition.

6. A method according to claim 5, wherein the processing method of claim 4 is selectively actuated during a first-write process.

7. A method according to any preceding claim, wherein said push-pull radial error signal is generated by detecting push-pull signals from only three radiation spots formed on the disk.

8. A method according to any preceding claim, wherein said optical recording medium has a single information layer.

9. A method according to any of claims 1 to 7, wherein said optical recording medium has a least two information layers.

10. A method according to claim 9, wherein each of the information layers comprise track sections arranged in spirals having the same directionality.

11. A method according to any preceding claim, wherein the track pitch (P) satisfies the following relation:

$P < 0.8\lambda / NA$

where λ is the wavelength of the scanning radiation and NA is the numerical aperture of the scanning radiation.

12. A method according to any preceding claim, wherein the optical recording medium format is one selected from the group of the DVD+RW, DVD-RW, DVD+R, DVD-R, and DVR formats.

13. A method according to any preceding claim, wherein the scanning comprises a first-write process.

14. An optical scanning device arranged to carry out the method of any preceding claim.